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wherein said processor tracks movement based on at least said signal returns that correspond to said further UWB pulses transmitted by said second UWB radar.

41. The system of claim 38, wherein said first UWB radar receives signal returns that correspond to said UWB pulses transmitted by said first UWB radar and signal returns that correspond to said further UWB pulses transmitted by said second UWB radar, and

wherein said processor tracks movement based on said signal returns that correspond to said UWB pulses transmitted by said first UWB radar and said signal returns that correspond to said further UWB pulses transmitted by said second UWB radar.

42. The system of claim 38, wherein the object comprises one or more human beings positioned outside of a building and wherein said first and second UWB radars are positioned inside the building.

43. The system of claim 38, wherein the boundary is defined by a location of a window.

44. The system of claim 38, wherein the boundary is defined by a location of a door.

45. The system of claim 38, wherein the first side of the boundary is outside a building, and wherein the second side of the boundary is inside the building.

46. The system of claim 38, wherein said processor generates an image based on said signal returns and tracks movement based on said image.

47. The system of claim 46, wherein said processor generates a reflectogram based on said signal returns and generates said image based on said reflectograms.

48. The system of claim 38, wherein said processor generates an image based on said returns signals, subtracts said image from a clutter map to thereby create a differential map, and tracks movement based on said differential map.

49. The system of claim 48, wherein said clutter map represents objects that should not cause said processor to trigger the alarm.

50. The system of claim 48, wherein said processor updates a track file based on said differential map, tracks movement in a given area based on said track file, and tracks movement based on the movement.

51. The system of claim 38, wherein said first and second UWB radars are positioned along the perimeter of a building.

52. The system of claim 38, further comprising:

- a first wireless link coupled to said processor; and

- a second wireless link coupled to said second UWB radar,

- wherein said second wireless link communicates with said first wireless link,

- wherein said second UWB radar receives signal returns that correspond to UWB pulses transmitted by said second UWB radar, and

- wherein said processor tracks movement based on said signal returns received by said first and second UWB radars.

53. The system of claim 38, wherein said first UWB radar receives signal returns that correspond to UWB pulses transmitted by said second UWB radar, and wherein said first and second UWB radars are synchronized.

54. The system of claim 38, wherein said second UWB radar receives signal returns that correspond to UWB pulses transmitted by said second UWB radar, wherein said first UWB radar receives signal returns that correspond to UWB pulses transmitted by said second UWB radar, wherein said first and second UWB radars are synchronized, and wherein said processor tracks movement based on said signal returns received by said first and second UWB radars.

55. A method for detecting motion of an object using at least first and second ultra wide band (UWB) radars that are separated from one another, comprising the steps of:

- (a) receiving first UWB pulses at the first and second UWB radars, the first UWB pulses generated by an UWB transmitter moving along a calibration path, the calibration path defining an area to be monitored;

- (b) determining positions of the first and second UWB radars in relation to each other and the calibration path based on the first UWB pulses received at the first and second UWB radars;

- (c) transmitting second UWB pulses from the first UWB radar;

- (d) transmitting third UWB pulses from the second UWB radar;

- (e) receiving signal returns at at least one of the first and second UWB radars; and

- (f) detecting motion within the area to be monitored based on the received signal returns.

56. The method of claim 55, wherein said step (b) comprises:

- (b.1) generating calibration data based on the first UWB pulses- and

(b.2) determining the positions of the first and second UWB radars in relation to each other and the calibration path on the calibration data.

57. The method of claim 55, further comprising g a step of generating an image based on the signal returns.

58. The method of claim 55, wherein said step (f) comprises the steps of:

- (f.1) generating reflectogram data based on the signal returns;
- (f.2) generating an image based on the reflectogram data; and
- (f.3) detecting motion based on the image.

59. The method of claim 55, wherein said step (f) comprises:

- (f.1) generating an image based on the signal returns;
- (f.2) subtracting the image from a clutter map to thereby create a differential map; and
- (f.3) detecting motion based on the differential map.

60. The method of claim 59, further comprising a step of triggering an alarm when motion is detected, and wherein the clutter map represents objects that should not cause the triggering of the alarm.

61. The method of claim 55, wherein said step (a) further comprises moving the UWB transmitter along the calibration path.

62. The method of claim 55, wherein said step (e) comprises receiving signal returns at both the first and second UWB radars.

63. A system for detecting motion of an object, comprising:

- a first ultra wide band (UWB) radar adapted to receive first UWB pulses from an UWB transmitter moving along a calibration path defining a

region to be monitored, said first UWB radar also adapted to transmit second UWB pulses; a second UWB radar separated from said first UWB radar, said second UWB radar adapted to receive said first UWB pulses from the UWB transmitter moving along the calibration path, said first UWB radar also adapted to transmit third UWB pulses; and

a processor in communications with said first and second UWB radars;

wherein said first and second UWB radars are also adapted to determine calibration data from the first UWB pulses, to receive signal returns, and to forward the calibration data and signal return data to said processor,

wherein said processor is adapted to determine positions of said first and second UWB radars in relation to each other and the calibration path based on the calibration data, and to detect motion within the region to be monitored based on the signal return data.

64. The system of claim 63, wherein the region includes a boundary having a first side and a second side, and wherein said processor triggers an alarm when it detects motion toward the first side of the boundary.

65. The system of claim 64, wherein the boundary is defined by a location of a window.

66. The system of claim 64, wherein the region includes a predetermined boundary, and wherein said processor triggers an alarm when said processor detects motion toward, and penetration of, the boundary by an object.

67. The system of claim 64, wherein the boundary includes a first side and a second side, and wherein said processor only triggers the alarm when said processor detects motion toward, and penetration of, the first side of the boundary.

68. The system of claim 67, wherein the boundary is defined by a location of a window.

69. The system of claim 65, wherein the first side of the boundary is outside a building, and wherein the second side of the boundary is inside the building.

70. The system of claim 63, wherein the processor generates an image based on the signal returns and detects motion based on the image.

71. The system of claim 63, wherein said processor generates one or more reflectograms based on the signal returns and generates the image based on the one or more reflectograms.

72. The system of claim 63, wherein said processor generates an image based on the returns signals, subtracts the image from a clutter map to thereby create a differential map, and detects motion based on the differential map.

73. The system of claim 72, wherein said processor triggers an alarm when it detects motion, and wherein the clutter map represents objects that should not cause the processor to trigger the alarm.